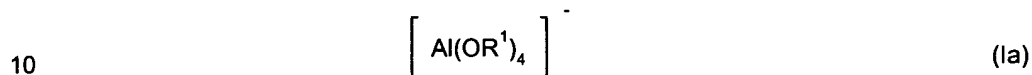


## Catalyst system for olefin polymerization

## Abstract

- 5 The present invention relates to a catalyst system for olefin polymerization comprising an organic transition metal compound and, as cocatalyst, an ionic compound made up of anions of the formula (Ia),



where

- the radicals  $\text{R}^1$  are identical or different and are each, independently of one another, a radical  
15  $\text{R}^2\text{R}^3(\text{CF}_3)_2$ ,

$\text{R}^2$  is a carbon or silicon atom and

- $\text{R}^3$  is hydrogen,  $\text{C}_1\text{-C}_{20}$ -alkyl,  $\text{C}_1\text{-C}_{20}$ -fluoroalkyl,  $\text{C}_6\text{-C}_{20}$ -aryl,  $\text{C}_6\text{-C}_{20}$ -fluoroaryl,  $\text{C}_7\text{-C}_{40}$ -arylalkyl,  
20  $\text{C}_7\text{-C}_{40}$ -fluoroarylalkyl,  $\text{C}_7\text{-C}_{40}$ -alkylaryl,  $\text{C}_7\text{-C}_{40}$ -fluoroalkylaryl or an  $\text{SiR}^4_3$  group, where

$\text{R}^4$  may be identical or different and is each  $\text{C}_1\text{-C}_{20}$ -alkyl,  $\text{C}_1\text{-C}_{20}$ -fluoroalkyl,  $\text{C}_6\text{-C}_{20}$ -aryl,  $\text{C}_6\text{-C}_{20}$ -fluoroaryl,  $\text{C}_7\text{-C}_{40}$ -arylalkyl,  $\text{C}_7\text{-C}_{40}$ -fluoroarylalkyl,  $\text{C}_7\text{-C}_{40}$ -alkylaryl or  $\text{C}_7\text{-C}_{40}$ -fluoroalkylaryl,

- 25 and Lewis-acid cations or Brönsted acids as cations.

In addition, the invention relates to the process for preparing such a catalyst system and to a process for the polymerization of olefins in which this catalyst system is used.

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